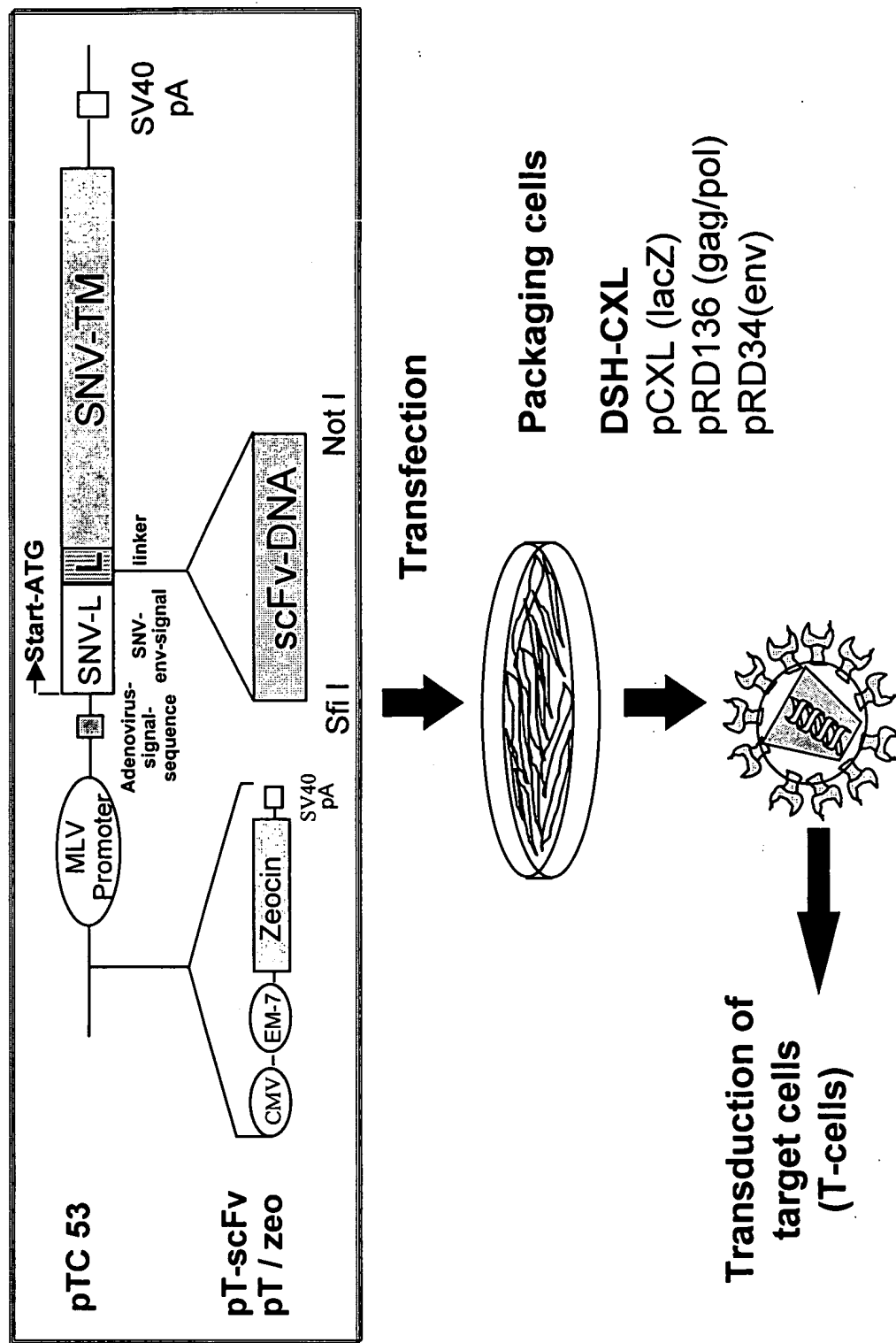


Transduction of T-cells with [SNV-scFv-Env] vectors



Production of a SNV-scFv-Env vector library

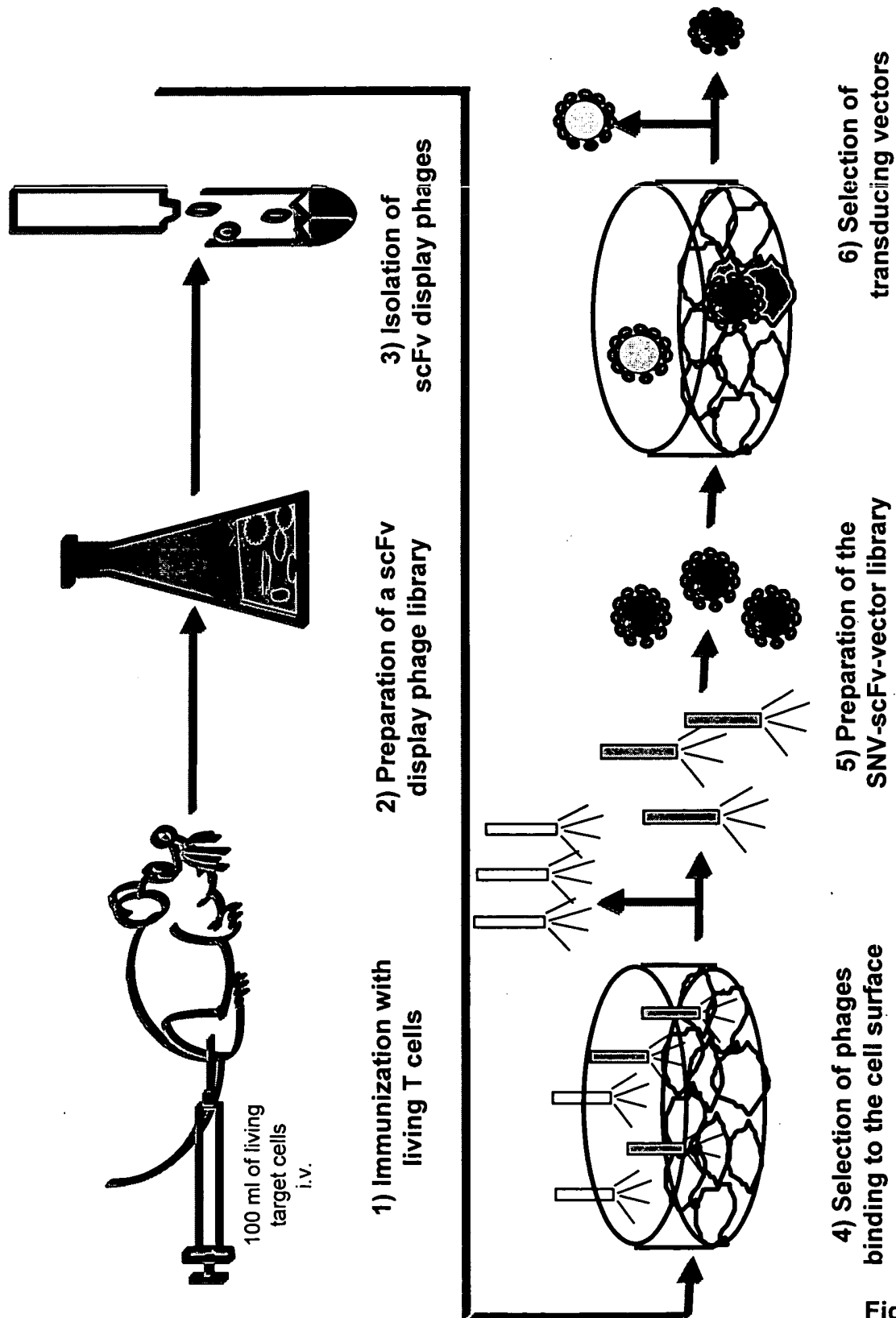
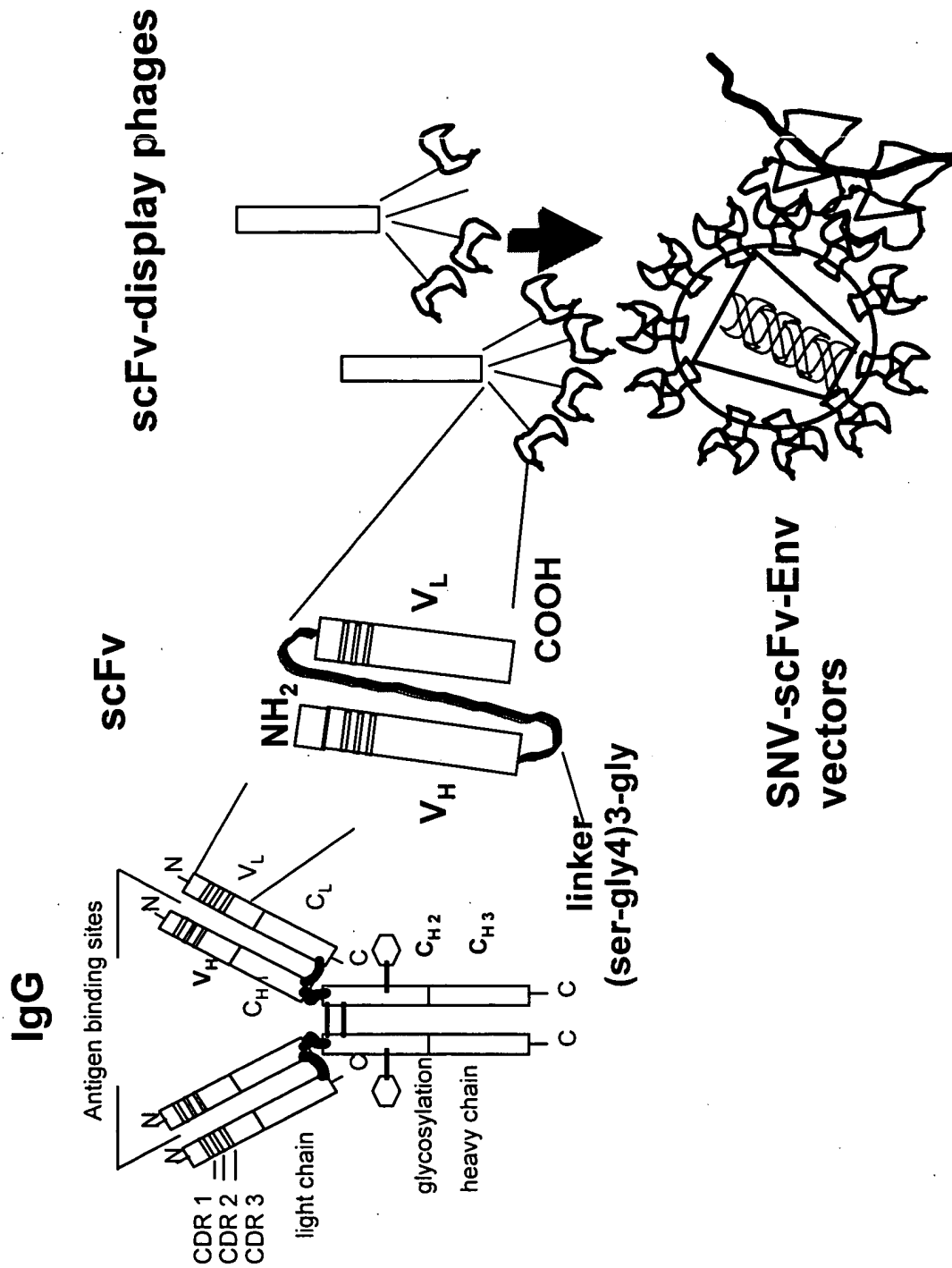


Fig. 2





1655 CTC GCG TGC ATT ATG AAG ACC CTG ACT GGC ATT ATA CAT GAC AAA ATT CAG GCA GTA AAA TCC TAG CACTAGTC 1731
211 L G P C I M K T L T R I I H D K I Q A V K S * 233

1732 CCACAGTACAGCCACTGCCACAGAG ATG GAT ACC CTA GGG GTC CGA TGG TCT AAG AAT TCT CGA GTC TAA GATCGATCGAAT 1815
1 M D T L G V R W S K N S R V * 15

1816 TCTTAGGTCA ATG ATT TGA CCAGA ATG TAC AAG AGC AGT GGG GAA TGT GGG AGG GGC TTA CGA AGG CCT TAA GTGACTA 1894
1 M I * M Y K S S G E C G R G L R R P * 16

1895 GGTACCCGATCCAGAC ATG ATA AGA TAC ATT GAT GAG TTT GGA CAA ACC ACA ACT AGA ATG CAG TGA AAAAA ATG CTT 1972
1 M I R Y I D E F G Q T T R M Q * M L 2

1973 TAT TTG TGA AATTGTG ATG CTA TTG CTT TAT TTG TAA CCATTATAGCTGCTATTAACAAAGTTAACAACAAATTGCAATTCATTTT 2060
3 Y L * M L L L Y L * 7

2061 ATG TTT CAG GTT CAG GGG GAG GTG TGG GAG GTT TTT TAA AGCAAGTAAACCTCTACAAATCAGCTGGCAAGCTAGATCTAGCTT 2147
1 M F Q V Q G E V W E V F * 13

2148 GGGTAATC ATG GTC ATA GCT GTT TCC TGT GTG AAA TTG TTA TCC GCT CAC AAT TCC ACA CAA CAT ACG AGC CGG 2222
1 M V I A V S C V K L L S A H N S T Q H T S R 22

2223 AAG CAT AAA GTG TAA AGCCTGGGTCCTA ATG AGT GAG CTA ACT CAC ATT AAT TGC GTT GCG CTC ACT GCG CCG TTT 2300
23 K H K V * M S E L T H I N C V A L T A R F 16

Fig. 4 (page 3 of 6)

2301 CCA GTC CGG AAA CCT GTC GTG CCA GCT GCA TTA ATG AAT CGG CCA AGC CGC GGG GAG AGG CCG TTT GCG TAT TGG 2375
17 P V G K P V V P A A L M N R P T R G E R R F A Y W 41

2376 GCG CTC TTC CGC TTC CTC GGT CAC TGA CTGGTGGCTCGGTTCGTTGGCTGGCGGAGCGGTATCAGCTACTCAAAGCGGGTAATTACGG 2466
42 A L F R F L A H * 50

2467 TTATCCACAGAAATCAGGGGATACCGAGGAAAGAAC ATG TGA GCAAAAGGCCGACGAAAAGGCCAGAACCGTAAAAAAGGCCCGGTTCGCGGTTTT 2563
1 M * 2

2564 TCCTAGGCCTCGCCCCCTGACGAGCATCTCAAAAATGAGCGCTTAGTACAGGTGGCGGAAGCCGACAGGACTATAAGATACCAGGGGTTTCOCOC 2663

2664 TCGAAGCTCCCTCGTGCGCTCTCCCTGTTGCGGACCTGCTCGGCTTACCGGATACCTGTGCGGCTTCTGCTTCGCGAAGGCTTGGCGCTTCTCA ATG 2759
1 M 1

2760 CTC AGG CTC TAG GTAATCTAGTTCGGTGTAGGTGGTTCGCTTCGAGCTGGCTGTGTGCGAGAACCCCCGCTTCAGCCCGACCCCTGCGCTTATC 2855
2 L T L * 5

2856 CGGTAACTATGCTCTTGAAGTCCAAACCGGTAAAGACAGCACACTTATGGCCACTGGCAGACGACCTACTGGTAAACAGGATTAAGCAGCGCAGGT ATG TAG GC 2952
1 M * 2

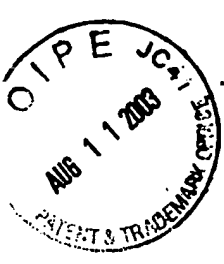
2953 GGTCCTACAGAGTTCTTGAAGTGTGGCTTAACTACAGCCCTACCTAGAGGACAGTATTTGGTATCTGCGCTCTCTCTCAACCCAGTTACCTTGGGAAAA 3052

3053 GAGTGTGTAGCTCTTGAATCCCGCAACCAACCCGCTGGTAGCGGTGTTTTTTTGTGTTCGACGACGATTAAGCCGAGAAAAAAGCATCTCAAGA 3152

3153 AGATCCTTTTGATCTTTTCTACCGGGTCTACGCTCTAGTTCGAAACAACTCAGTTACGGGATTTTGGTC ATG AGA TTA TCA AAA AGG ATC 3243
1 M R L S K R I 7

3244 TTC ACC TAG ATCCTTTTAAATAAAA ATG AAG TTT TAA ATCAATCTAAAGCATAT ATG AGT AAA CTT GGT CTC ACA GTT ACC 3325
8 F T * M K F * H S K L G L T V T 9

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4122 AGGAGGCAA ATG CCG CAA AAA AGG GAA TAA GGGGACCGGAA ATG TTG AAT ACT CAT ACT CTT CCT TTT TCA ATA 4199
1 M P Q K R E * M L N T H T L P F S I 11

4200 TTA TTG AAG CAT TTA TCA GCG TTA TTG TCT CAT GAG CCG ATA CAT ATT TGA ATG TAT TTA GAA AAA TAA ACAATA 4275
12 L L K H L S G L L S H E R I H I * M Y L E K * 6

4276 GGGTTTCGGCACATTTCCCGGAAAGTGGCCACCTGACGTCTAAGAAACCATTTATTC ATG ACA TTA ACC TAT AAA AAT AGG CGT ATC 4365
1 M T L T Y K N R R I 10

4366 ACG AGG OCC TTT GGT CTC GCG CCG ATG CAC AAC CTC TGA CAC ATG CAG CTC CCG GAG ACG GTC 4440
11 T R P F R L A R F G D D G E N L * M Q L P E T V 7

4441 ACA GGT TGT CTG TAA GGG ATG CCG GGA GCA GAC AAG CCG GTC AGG CCG GGT CAG CCG GTG TTG CCG GGT GTC GCG 4516
8 T A C L * M P G A D K P V R A R Q R V L A G V G 19

4517 GGT GCG TTA ACT ATG CCG CAT CAG AGC AGA TTG TAC TCA GAGTGCACCAT ATG CCG TGT GAA AAT CCG CAC AGA TGC 4593
20 A G L T M R H Q S R L Y * M R C E I P H R C 9

4594 GTA AGG AGA AAA TAC CCG ATC AGG CCG CAT TCG CCA TTC AGG CTG CCG AAC TGT TCG GAA GCG CCA TCG GTG CCG 4668
10 V R R K Y R I R R H S P F R L R N C W E G R S V R 34

4669 GGC TCT TCG CTA TTA CCG CAG CTG GCG AAA GCG GGA TGT GGT GCA AGS CCA TTA AGT TCG GTA ACG CCA GCG TTT 4743
35 A S S L L R Q L A K G G C A A R R L S W V T P G F 59

4744 TCC CAG TCA CGA GGT TGT AAA ACG ACG GGC AGT 4776
60 S Q S R R C K T T A S 70

Fig. 4 (page 6 of 6)